



# INTAKE (INDUCTION)(H4DO)

## *IN(H4DO)*


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1. General Description
2. Air Cleaner Element
3. Air Intake Duct
4. Air Cleaner Case
5. Air Intake Boot

## INTAKE (INDUCTION)(H4DO) > General Description

### CAUTION

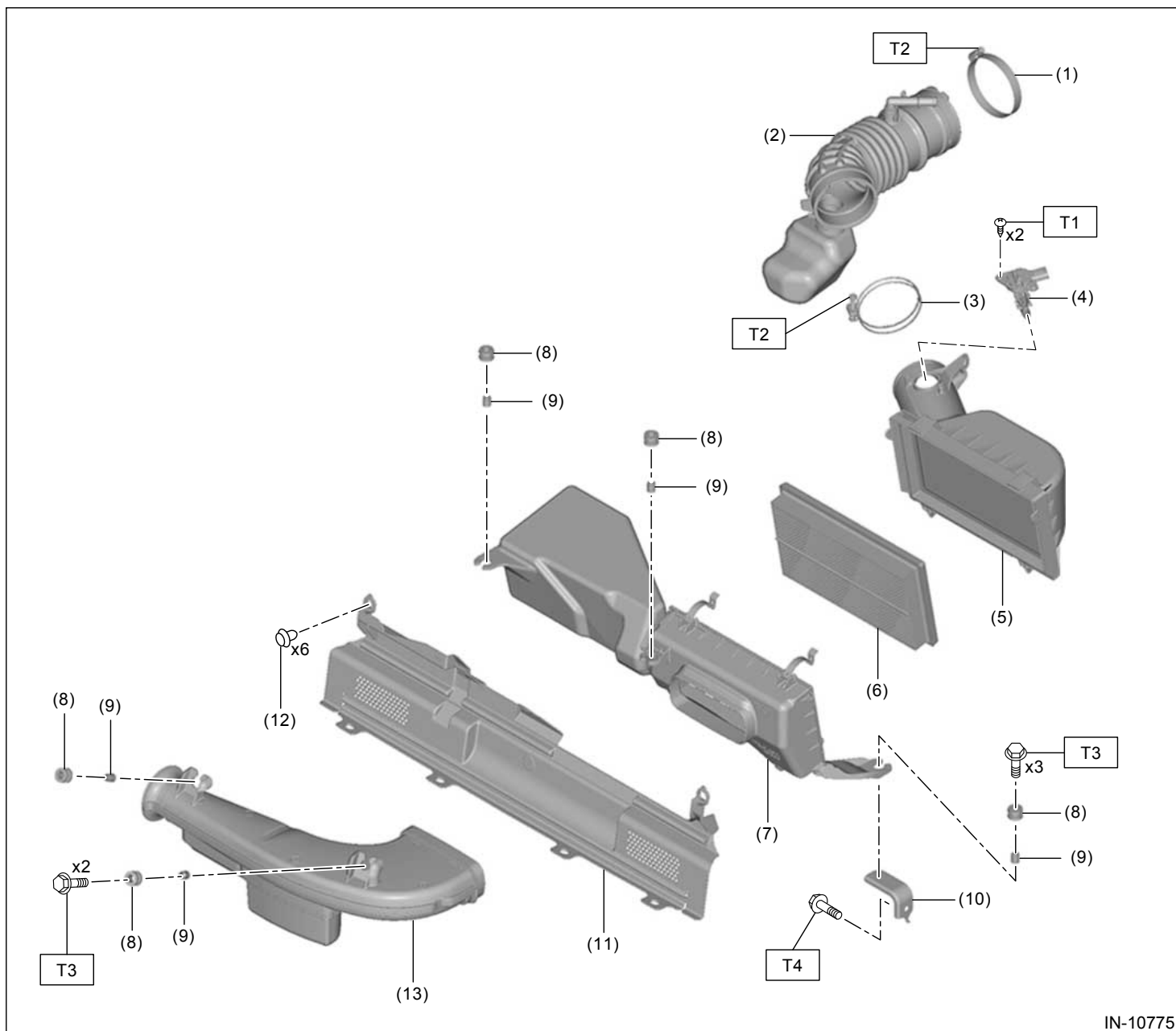
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- When performing service operation, refer to "Repair Contents" in "General Description".  [Ref. to REPAIR CONTENTS>Repair Contents.](#)
- Prior to starting work, pay special attention to the following:
  1. Always wear work clothes, a work cap, and protective shoes. Additionally, wear a helmet, protective goggles, etc. if necessary.
  2. Protect the vehicle using a seat cover, fender cover, etc.
  3. Prepare the service tools, clean cloth, containers to catch grease and oil, etc.
- Vehicle components are extremely hot immediately after driving. Be wary of receiving burns from heated parts.
- When performing a repair, identify the cause of trouble and avoid unnecessary work.
- Before disconnecting connectors of sensors or units, be sure to disconnect the ground terminal from the battery sensor.
- Always use the jack-up point when the lifting device, shop jacks or rigid racks are used to support the vehicle.
- Before starting works, remove dirt and corrosion around the target area.
- Keep the removed parts in order and protect them from dust and dirt.
- All removed parts, if to be reused, should be reinstalled in the original positions with attention to the correct directions, etc.
- For the parts except for the non-reusable parts, replace them with new parts if necessary.
- Be sure to tighten bolts and nuts to the specified torque.

## INTAKE (INDUCTION)(H4DO) > General Description

### COMPONENT

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(1) Clamp

(8) Cushion

**Tightening torque: N·m (kgf-m, ft-lb)**

(2) Air intake boot

(9) Spacer

**T1: 1 (0.1, 0.7)**

(3) Clamp

(10) Air cleaner case bracket

**T2: 3 (0.3, 2.2)**

(4) Mass air flow and intake air temperature sensor

(11) Air intake plate

**T3: 6 (0.6, 4.4)**

(5) Air cleaner case (rear)

(12) Clip

**T4: 35 (3.6, 25.8)**

(6) Air cleaner element

(13) Air intake duct

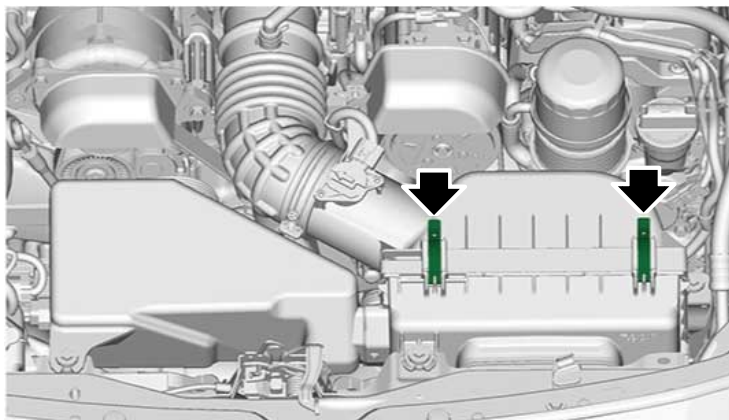
(7) Air cleaner case (front)

## INTAKE (INDUCTION)(H4DO) > Air Cleaner Element

### REMOVAL

1. Release the clip lock.

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2. Lift the air cleaner case (rear) at an angle as shown in the figure and remove the air cleaner element.

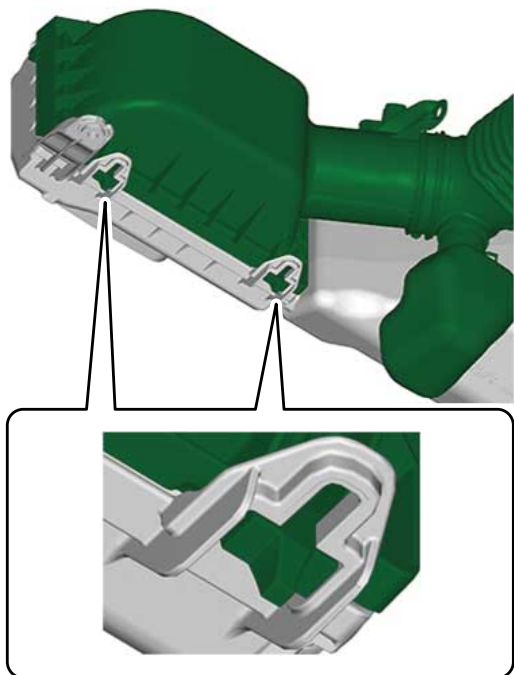
#### Caution:

**To prevent damage due to interference between the air cleaner case (rear) and engine oil cooler, be careful not to let the parts contact during the work.**

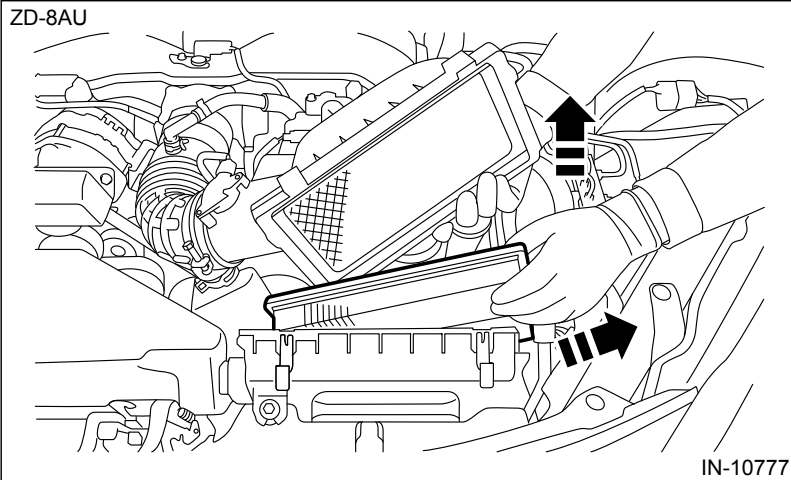
#### Note:

**Disengage the claws of the air cleaner case (rear) from the holes on the air cleaner case (front).**

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## INTAKE (INDUCTION)(H4DO) > Air Cleaner Element

### INSTALLATION

#### Caution:

Be sure to use **SUBARU** genuine air cleaner element suitable to the engine type. Otherwise the engine performance may decrease.

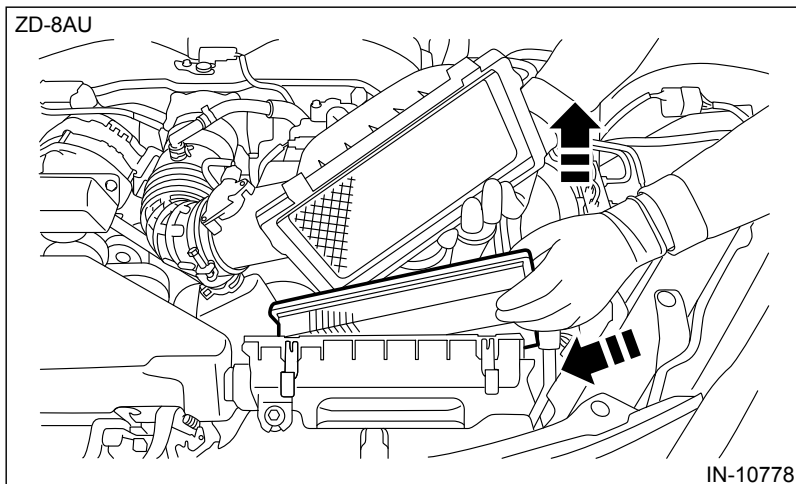
#### Note:

If any foreign matter is found in the air cleaner case, clean it.

1. Lift the air cleaner case (rear) at an angle as shown in the figure and set the air cleaner element.

#### Caution:

To prevent damage due to interference between the air cleaner case (rear) and engine oil cooler, be careful not to let the parts contact during the work.

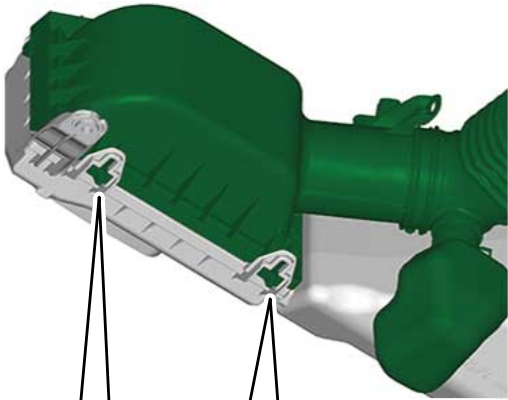


2. Align the claws of the air cleaner case (rear) with the air cleaner case (front), and secure the parts with clips.

**Note:**

- Check that the claws on the air cleaner case (rear) are securely engaged.

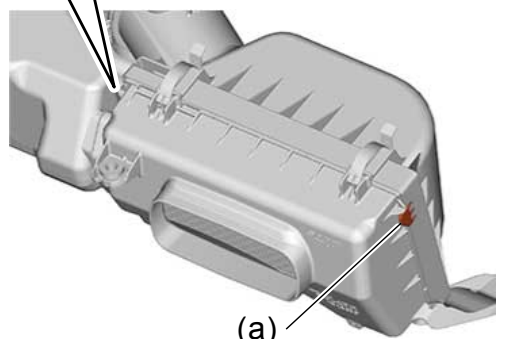
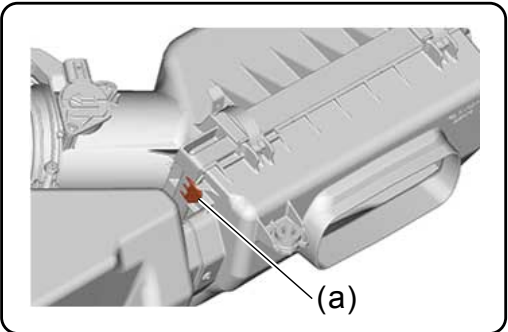
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- Make sure that the positioning protrusions (a) at the right and left sides of the air cleaner case do not ride over.

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INTAKE (INDUCTION)(H4DO) > Air Cleaner Element

**INSPECTION**

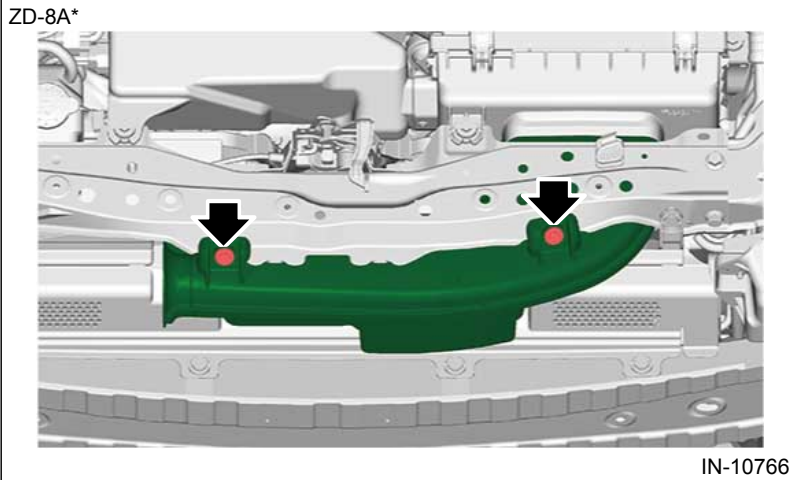
- 1.** Check that there is no deformation, cracks or other damages.
- 2.** Check for excessive dirt.
- 3.** Replace the air cleaner case (rear) if the HC absorption filter is damaged.



## INTAKE (INDUCTION)(H4DO) > Air Intake Duct

### REMOVAL

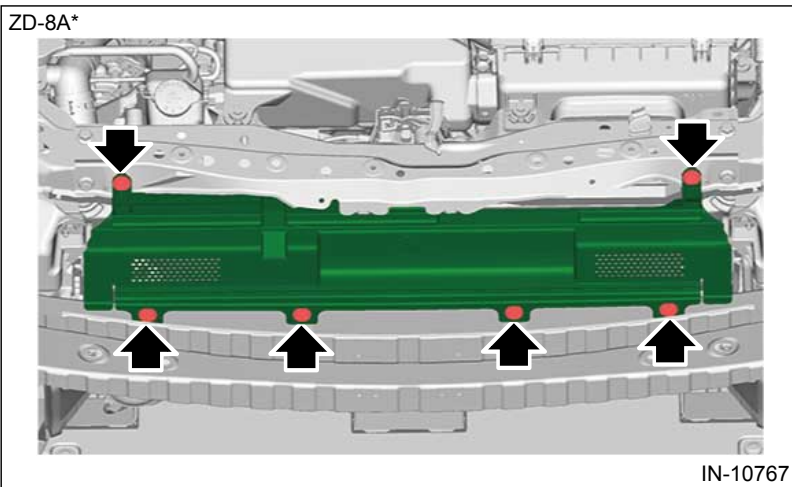
1. Remove the bumper face front.  [Ref. to EXTERIOR/INTERIOR TRIM>Front Bumper>REMOVAL > BUMPER FACE.](#)
2. Remove the air intake duct.



3. Remove the clips and remove the air intake plate.

#### Note:

**Perform this procedure only when required.**

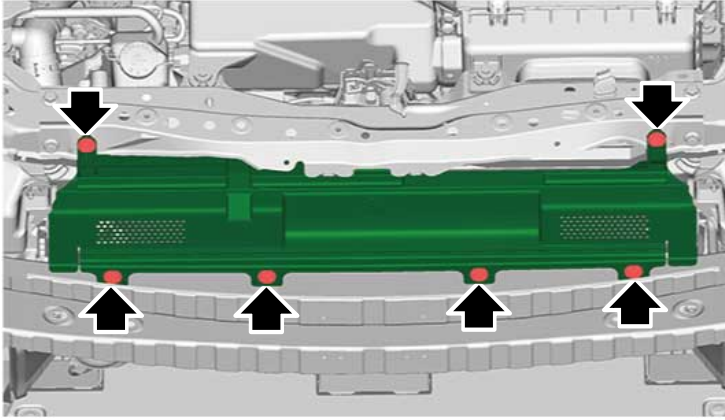


## INTAKE (INDUCTION)(H4DO) > Air Intake Duct

### INSTALLATION

1. Install the air intake plate.

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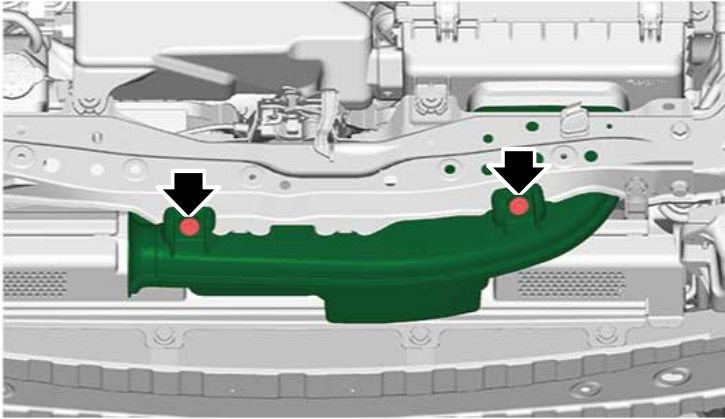
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2. Install the air intake duct.

**Tightening torque:**

6 N·m (0.6 kgf-m, 4.4 ft-lb)

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3. Install the bumper face front.  [Ref. to EXTERIOR/INTERIOR TRIM>Front Bumper>INSTALLATION > BUMPER FACE.](#)


## INTAKE (INDUCTION)(H4DO) > Air Intake Duct

### INSPECTION

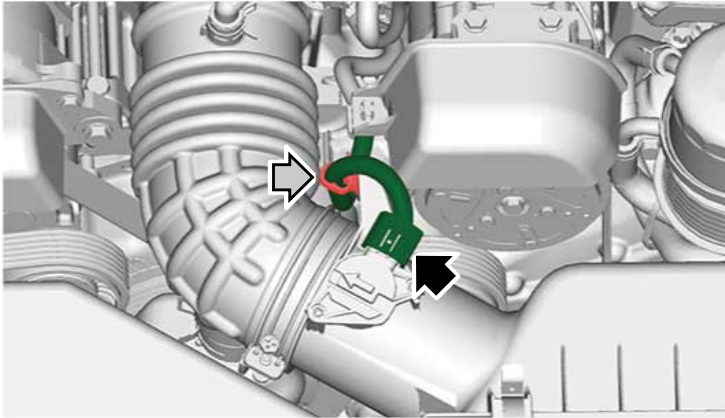
1. Check that there is no deformation, cracks or other damages.
2. Check inside for foreign matter.

## INTAKE (INDUCTION)(H4DO) > Air Cleaner Case

### REMOVAL

1. Disconnect the ground terminal from battery sensor.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)
2. Disconnect the connector from the mass air flow and intake air temperature sensor, and remove the clip securing the harness.

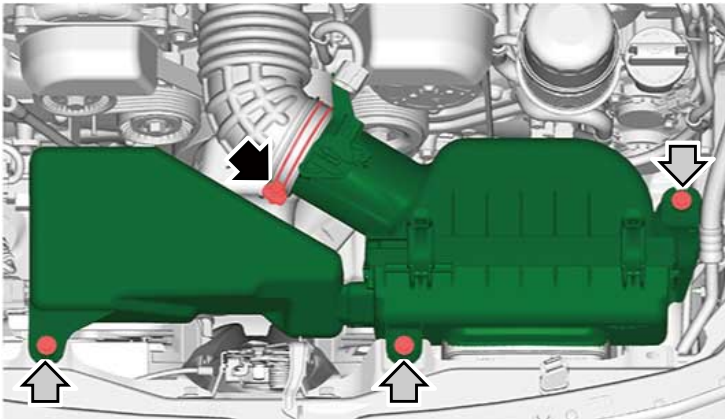
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3. Loosen the clamp, remove the bolt, and then remove the air cleaner case as a unit.

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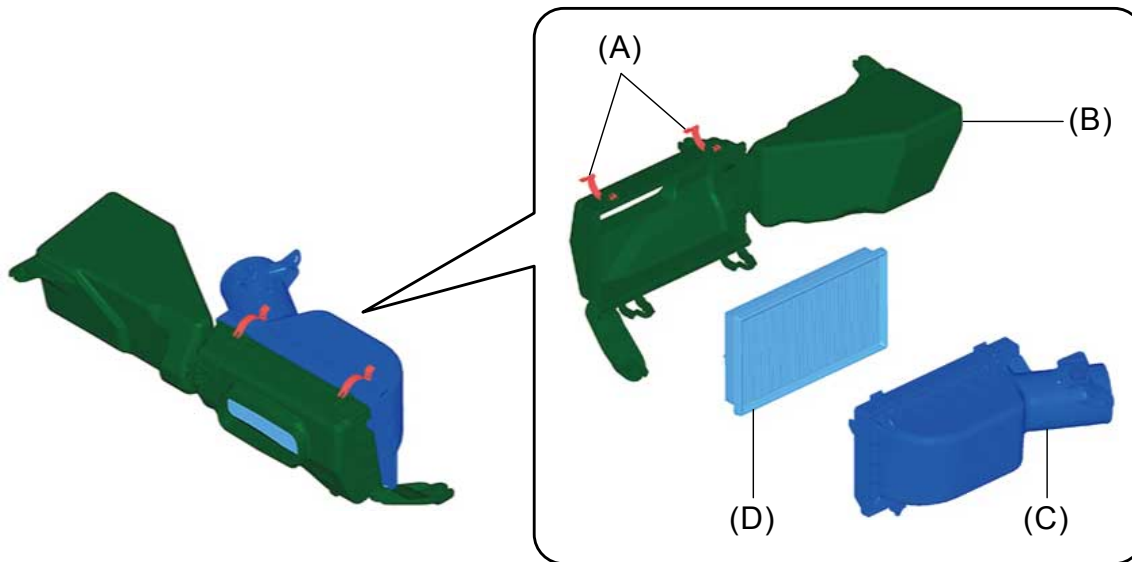
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4. Release the lock of clip (A), and remove the air cleaner case (rear) (C) and air cleaner element (D) from the air cleaner case (front) (B).

#### Note:

**Perform this procedure only when required.**

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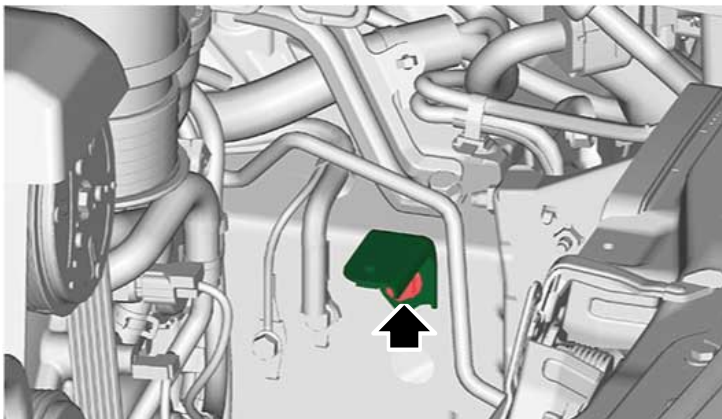
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5. Remove the air cleaner case bracket.

**Note:**

**Perform this procedure only when required.**

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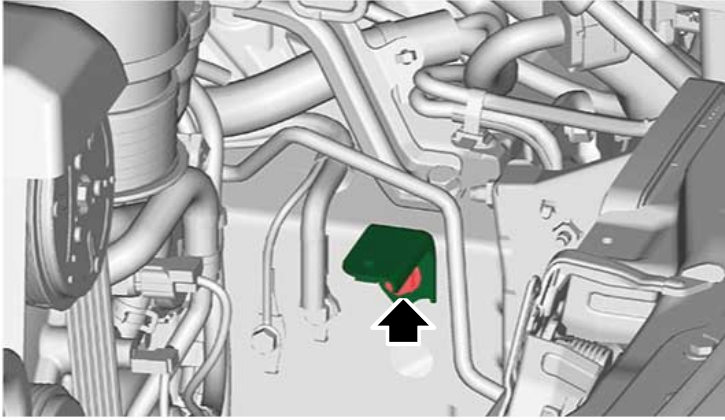
## INTAKE (INDUCTION)(H4DO) > Air Cleaner Case INSTALLATION

1. Install the air cleaner case bracket.

**Tightening torque:**

35 N.m (3.6 kgf-m, 25.8 ft-lb)

ZD-8A\*



IN-10768

2. Set the air cleaner element (D) to the air cleaner case (front) (B), install the air cleaner case (rear) (C) and secure it with the clip (A).

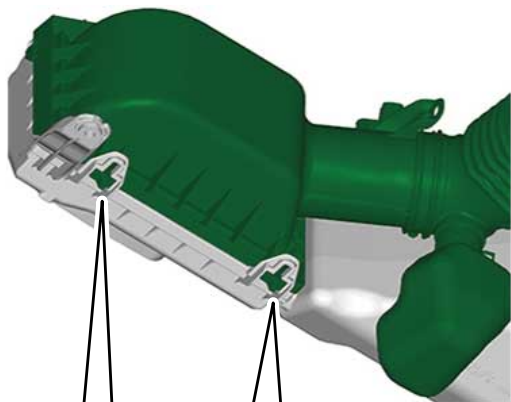
**Caution:**

**Be sure to use SUBARU genuine air cleaner element suitable to the engine type.  
Otherwise the engine performance may decrease.**

**Note:**

- Check that the claws on the bottom of the air cleaner case are securely engaged.

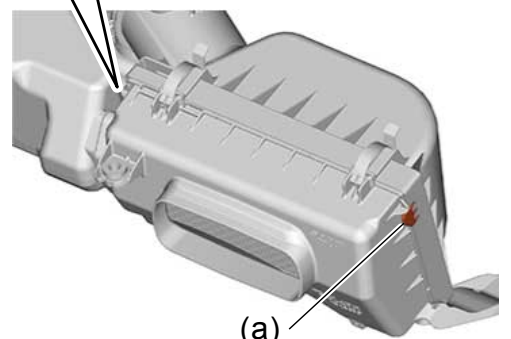
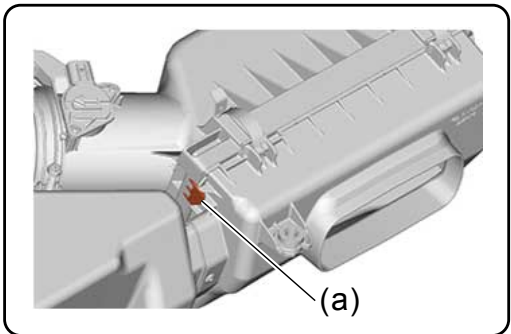
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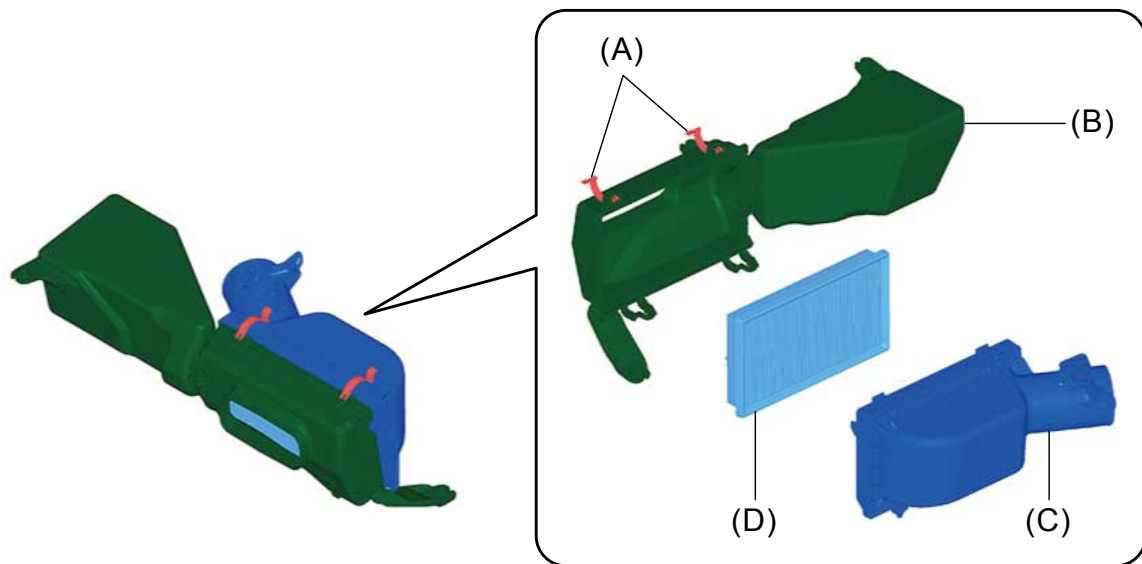
- Make sure that the positioning protrusions (a) at the right and left sides of the air cleaner case do not ride over.

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ZD-8A\*



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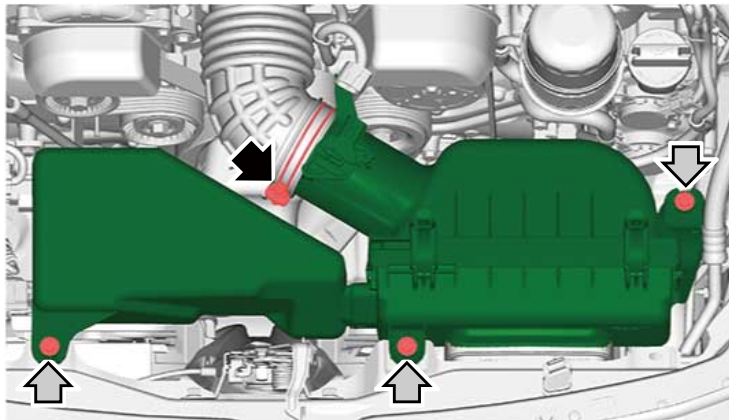
3. Install the air cleaner case as a unit.

**Tightening torque:**

Bolt: 6 N·m (0.6 kgf-m, 4.4 ft-lb)

Clamp: 3 N·m (0.3 kgf-m, 2.2 ft-lb)

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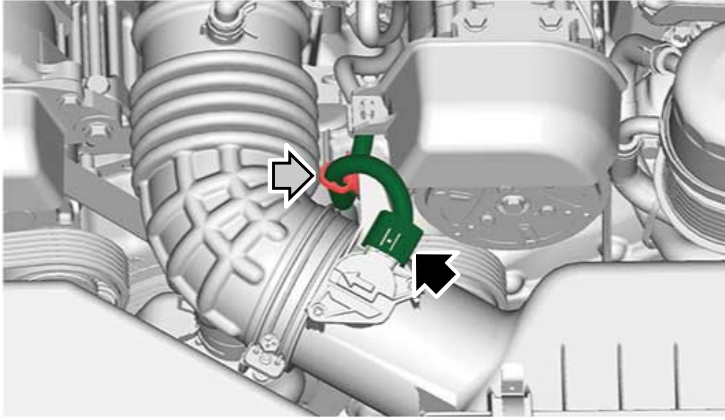


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4. Connect the connector to the mass air flow and intake air temperature sensor, and secure the harness with clip.



ZD-8A\*



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- 5.** Connect the ground terminal to battery sensor.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)

## INTAKE (INDUCTION)(H4DO) > Air Cleaner Case

### INSPECTION



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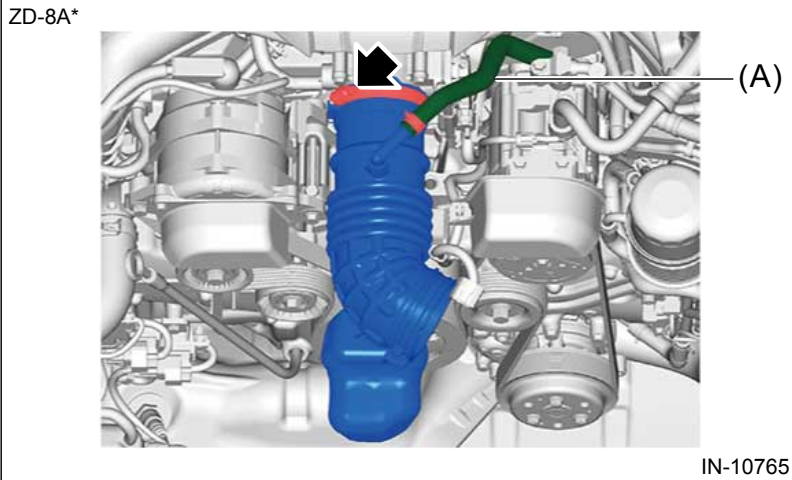
- 1.** Check that there is no deformation, cracks or other damages.
- 2.** Check inside for foreign matter.
- 3.** Replace the air cleaner case (rear) if the HC absorption filter is damaged.



## INTAKE (INDUCTION)(H4DO) > Air Intake Boot

### REMOVAL

1. Disconnect the ground terminal from battery sensor.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)
2. Remove the air cleaner case.  [Ref. to INTAKE \(INDUCTION\)\(H4DO\)>Air Cleaner Case>REMOVAL.](#)
3. Disconnect the PCV hose No. 2 (A), loosen the clamp and remove the air intake boot.



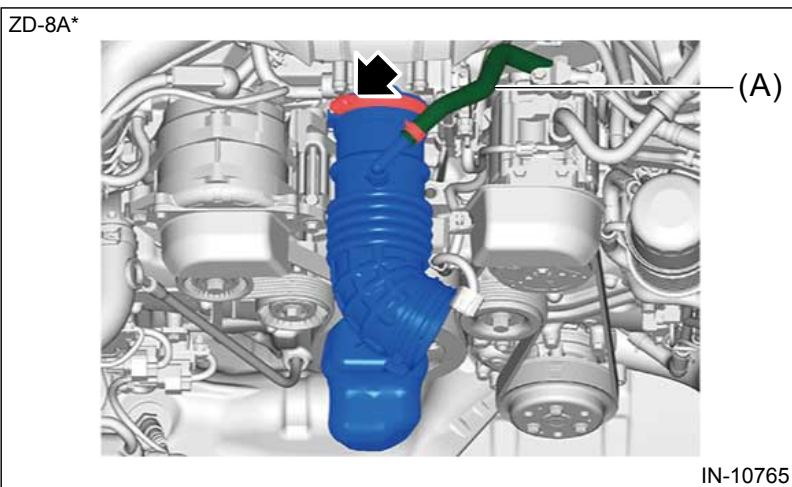
## INTAKE (INDUCTION)(H4DO) > Air Intake Boot

### INSTALLATION

1. Install the air intake boot, and connect the PCV hose No. 2 (A).

#### Tightening torque:

3 N·m (0.3 kgf-m, 2.2 ft-lb)



2. Install the air cleaner case.  [Ref. to INTAKE \(INDUCTION\)\(H4DO\)>Air Cleaner Case>INSTALLATION.](#)
3. Connect the ground terminal to battery sensor.  [Ref. to REPAIR CONTENTS>NOTE > BATTERY.](#)

## INTAKE (INDUCTION)(H4DO) > Air Intake Boot

### INSPECTION

- 1.** Check that there is no deformation, cracks or other damages.
- 2.** Check inside for foreign matter.